

APEAX XTREME

INSTALLATION GUIDELINES



Guide for Installing Paint Protection Film

Discover the professional techniques for applying paint protection film with this comprehensive guide. The instructions provided encompass both installation gel and slip solution methods, allowing you to select the approach that aligns with your preferences.

It is crucial to meticulously adhere to all the instructions outlined here to achieve an end product of superior quality.



Prior to Installation (Surface Preparation)

To prevent contamination during the installation process, it is crucial to meticulously clean the vehicle's surface. We recommend using a high pH detergent diluted with water for washing, as this mixture effectively removes oil, dirt, grease, bugs, and road film better than regular soap.

Focus on cleaning the area surrounding the section where the film will be applied. For instance, if you intend to install a strip of paint protection film (PPF) on the car hood, ensure the entire hood, fender, and headlights are thoroughly cleaned.

To prevent dirt from leaching out during installation, employ a high-pressure washer and/or pressurized air. Cleanse the seams and openings around headlights, grilles, fog lights, etc., ensuring a pristine base for PPF installation.

After washing the car, use a cleaning clay bar, pad, mitt, or auto scrub to meticulously cleanse the surface before applying PPF. The clay will effectively eliminate paintwork defects such as metal dust, road debris, and particulates not removed during earlier cleaning processes.

If additional degreasing is necessary, use isopropyl alcohol to remove oil deposits and wipe the surface dry.

For optimal cleanliness, employ pure isopropyl alcohol and lint-free wipes to clean the edges of the designated PPF application area. This step guarantees that the edges are free from all contaminants, enhancing the surface contact with the film.

When mixing the solutions below, please use a 1000ml spray bottle of distilled water. It is important to measure exactly using a syringe, if you add too much alcohol you may burn the adhesive. You can also use straight hot water (very hot) in place of tack solution. Do not use too much alcohol.

Slip Solution

Johnson's Baby Shampoo	_____	2.5 - 3.5ml (needs to be measured with a syringe*)
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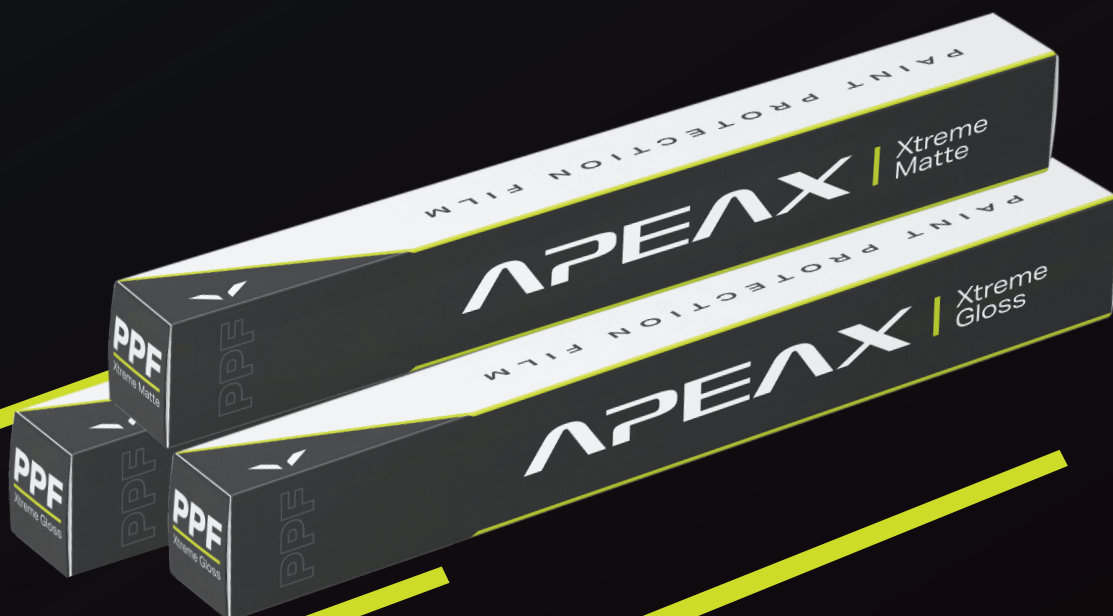
Hybrid Solution

A Hybrid Solution is a balanced spray mix of distilled water, baby shampoo, and isopropyl alcohol to provide both slip for positioning and tack for adhesion, ideal for complex curves and precise areas.

Isopropyl alcohol (Isopropanol) 99%	_____	100ml
Johnson's Baby Shampoo	_____	2ml*

Tack Solution

Isopropyl alcohol (Isopropanol) 99%	_____	100ml
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APEAX OPTISHIELD™ WPF INSTALLATION GUIDE

Windshield Protection Film – Professional Installation

OptiShield™ WPF by Apeax Films is engineered to protect your windshield from stone chips, road debris, pitting, and everyday wear. For best results, follow this installation guide carefully, keep your workspace clean, and take your time with each step.



Recommended Tools

- Clean microfiber towels
- Spray bottle with **slip solution** - As above approved PPF slip
- Squeegee suitable for film installation
- 3:1 Water/IPA cleaning solution
- Glass scraper or razor blade (if needed, used carefully)



STEP 1: DEEP CLEAN THE WINDSHIELD (THEN CLEAN IT AGAIN)

A flawless installation begins with a spotless surface. Even a tiny speck of dust can show up directly in your line of sight once the film is installed, so thorough preparation is critical.

What to Do:

- Wash the windshield and surrounding panels to remove loose dust and dirt.
- Wipe down your installation area to minimise contamination.
- Remove any existing glass coatings, hydrophobic layers, or Rain-X style products.
- Use a 3:1 Water/IPA cleaning solution to break down residue and ensure the glass is completely bare.
- Wipe down your installation area to minimise contamination.
- Remove any existing glass coatings, hydrophobic layers, or Rain-X style products.
- Use a **3:1 Water/IPA cleaning solution** to break down residue and ensure the glass is completely bare.

Why It Matters:

Any leftover dirt, grease, or coating will prevent proper adhesion and can cause bubbles, streaks, or hazing. A perfectly clean surface is the foundation of a perfect installation.



STEP 2: ALIGN THE FILM & PRE-RELEASE THE LINER

Once your windshield is clean and dry, it's time to position your OptiShield™ WPF.

Positioning Tips:

- Lay the film over the windshield with the **liner facing outward**.
- Ensure the film follows the natural shape of the glass with even spacing on all edges.

Pre-Releasing the Liner:

This step prepares the film for a smooth install without fully exposing the adhesive.

- With the film in place, peel the liner **halfway down** while spraying slip solution underneath.
- Repeat on the opposite side.
- **Do not** remove the liner entirely at this stage—only loosen it so it can be easily pulled during installation.

Carefully roll or lift the film off the windshield, keeping the liner in place and taking care not to crease the material.



STEP 3: INSTALL, POSITION & TACK OPTISHIELD™ WPF

Before locking anything in place, make sure the film sits perfectly on the glass.

Installing the Film:

- Generously spray slip solution onto the windshield.
- Begin peeling the liner away from one end of the film and lay the exposed adhesive side onto the glass.
- Continue removing the liner gradually while laying the film down, ensuring plenty of slip solution stays between the film and the glass.

Fine-Tuning the Position:

- Apply plenty of slip solution under the film to allow smooth movement.
- Slide and adjust until the edges sit evenly across the windshield

Tacking the Film:

- Once aligned, squeegee a single firm pass **straight down the centre** of the windshield.
- This anchors the film and prevents shifting as you begin the main squeegee process.



STEP 4: SQUEEGEE ALL MOISTURE OUT

OptiShield™ WPF is thicker and more durable than standard window tint films, so thorough moisture removal is essential.

Squeegee Technique:

- Work from the centre outward in overlapping strokes.
- Apply firm, consistent pressure—expect to use more force than with a standard film.
- Plan for **6–8 full passes**, checking for any remaining pockets of water.

What to Look For:

- No visible water pockets
- No trapped air
- Edges fully seated with no lifting
- Smooth, distortion-free visibility
- Moisture that is not removed can create hazing or lift points, so take your time with this step.



Final Notes

- Small streaks or haze may appear during the first **24–48 hours**—this is normal and will clear as the remaining micro-moisture evaporates.
- Avoid car washes, pressure washers, or harsh chemicals for at least **48 hours** after installation.
- OptiShield™ WPF is typically **fully cured after approximately 7 days**, depending on climate and conditions.

APEAX WINDOW TINT INSTALLATION GUIDE

Read this first (success rules)

- **Workspace:** Indoors, still air, clean floor. Dust is your enemy.
- **Temperature:** Ideal working range **10–35°C (50–95°F)**.
- **Glass cleanliness:** 80% of tint failures are contamination at edges.
- **Cure time:** Do not roll windows down until cured (details below).
- **Legal notice:** Always comply with local tint laws (VLT limits vary).



1 TOOLS & MATERIALS (APEAX RECOMMENDED)

Essential

- Spray bottle(s)
- Tint slip solution (see mix below)
- Fresh razor blades (stainless preferred)
- Olfa/utility knife with snap blades
- Squeegee(s): hard + soft (or one hybrid)
- Hard card / corner tool (for bottom gasket + tight corners)
- Lint-free microfiber & paper towels
- Scrub pad / non-scratch pad (for initial wash)
- Masking tape (to control seals/liners and reduce contamination)
- Clean heat gun (optional for sides, **required for rear windshield shaping**)

Nice to have

- Interior panel tools (for better access on some cars)
- LED work light
- “Bulldozer” style squeegee for rear glass
- Edge-wrapping micro-squeegee for final finishing

2 SLIP SOLUTION (SAFE MIX)

Use clean water (preferably filtered):

- **1 liter water + 2–4 drops baby shampoo** (or a dedicated tint slip solution).
- Mix gently (avoid foam).

Tip: If film slides too much, reduce soap. If it grabs too fast, add 1–2 drops.



3 VEHICLE PREP & CONTAMINATION CONTROL

1. **Wash hands/forearms** (seriously).
2. Clean the inside door tops, seals, and surrounding trim (dust falls onto wet film).
3. If door glass: **tape back felt liners** or wipe them thoroughly—felt sheds fibers.
4. Keep a towel on the dash and door cards to catch run-off.

4 GLASS CLEANING (NON-NEGOTIABLE)

1. **Spray slip solution** on the inside glass.
2. **Scrub** the glass thoroughly.
3. **Razor scrape** (light pressure, consistent angle) to remove glue, overspray, and road film.
4. **Squeegee dry** top-to-bottom.
5. **Detail edges:** use a hard card wrapped in a microfiber to clean under seals and along borders.
6. **Final pass:** spray lightly and squeegee again.

Pro tip: Roll the window down 2–3 cm to clean the top edge, then roll up.



5 INSTALLATION PROCESS

(Side windows)

Step A — Pattern & cut (two options)

Option 1: Pre-cut kit

- Dry-fit on the outside of the glass first (protective liner on).
- Confirm full coverage with a tiny margin (no short corners). If it's wrong, stop and verify kit/vehicle.

Option 2: Bulk roll (hand cut)

- Cut a piece oversized by ~3–5 cm per side.
- Wet the outside glass so the film “clings” while you shape/cut.
- Place film on the outside glass and align.
- Cut bottom and sides first. Leave a small safety margin.
- Lower the window slightly and trim the top edge cleanly using the glass edge as guide.
- Final target: a neat fit with minimal light gaps and no edge crowding.

Step B — Install film on the inside

1. **Re-clean inside glass quickly** (light spray + squeegee).
2. Spray the inside glass generously with slip solution.
3. Peel the liner from the film **slowly** (use two pieces of tape as “tabs” if needed).
4. As you peel: **spray the adhesive side continuously** so it never goes dry.
5. Bring film inside, **adhesive to glass**, and float it into position.
6. Align the **top edge first**, then sides.
7. Tuck film edges under the side seals using a hard card (wrapped in microfiber).

Step C — Squeegee (lock it down)

Use firm, consistent strokes:

1. Initial anchor: one strong pass down the center.
2. Work from **center → outwards** (left/right), then upwards if needed.
3. Finish by driving moisture to the **nearest edge**, not back into the middle.
4. For bottom gasket: use hard card strokes to push water out and seat the film.

Golden rule: Keep the film surface wet while squeegeeing to prevent drag marks.

Step D — Edge finishing

1. Wrap a microfiber around a squeegee/card and do final edge passes.
2. Check corners closely for trapped water or fingers.
3. Wipe surrounding trim and seals.

6 REAR WINDSHIELD (curved glass) Heat shrinking

Rear glass ***must be heat-shaped on the outside first.***

Heat shrink steps

1. Clean outside rear glass and wet it.
2. Lay film on the outside, liner facing you (adhesive side toward glass).
3. Center it and smooth lightly so it sits flat.
4. Identify “fingers” (vertical raised ripples).
5. Heat gently while using a card/squeegee to press fingers down and shrink them out:
 - Keep the heat gun moving (never park in one spot).
 - Work in sections (top → middle → bottom).
6. Once the film conforms perfectly, you can proceed to install it on the inside with the same wet-install method as side windows (but more patience + larger squeegee strokes).

7 QUALITY CHECKLIST (before you call it done)

- No dust specks in driver’s view zone
- No edge lifting, especially top corners
- No “silvering” (dry adhesive areas)
- Seals are dry and clean (prevents future peel)
- Rear defroster lines are not damaged (never scrape inside rear with a blade)



8 CURING & AFTERCARE (give it time)

Normal cure window: 3–10 days, depending on weather/humidity.

- Do not roll windows down for at least 3–5 days (longer in cold or humid conditions).
- Haze/milky look or small water pockets can be normal early on.
- Clean only with a soft microfiber and ammonia-free glass cleaner after cure.

9 TROUBLESHOOTING (fast fixes)

Film won't slide / grabs too fast

- More slip solution on glass + adhesive, reduce handling time.

Bubbles

- Water bubbles usually cure out; air bubbles need re-squeegee.
- For stubborn small bubbles: gentle heat + card pressure.

Edge lifting

- Usually contamination or insufficient edge squeegee pressure.
- Re-wet edge, lift slightly if possible, flush, re-squeegee, dry the seal area.

Dust contamination

- If it's in a critical area, replacement is often the honest fix.



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SURFACE PROTECTION

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